Duke University Hospital Fire/Life Safety Management Plan 2007

Introduction

One of the most serious issues facing Duke University Hospital, Medical Center, Duke Clinic and the Health Systems is the threat of fire. The risk is increased because work conducted in clinical, research and other laboratories may involve flammable liquids and other hazardous substances. In addition, the use of specialized equipment such as lasers and other ignition sources utilized in oxygen-enriched atmospheres increases the threat of fire. This threat is far more critical in patient care areas since patients are often incapable of self- preservation.

Administration of Fire/Life Safety Plan:

Certifications, Accreditations and Competencies:

OESO-Fire Safety Division personnel that conduct surveys and inspections, monitor and oversee installation, testing or maintenance of fire detection or fire suppression equipment, and/or respond to requests for service are required to possess specific certifications, experience and be able to demonstrate competencies that are essential to the duties they perform.

All OESO – Fire Safety Specialists are highly knowledgeable of all codes, standards, rules, and policies as well as extensive knowledge of the buildings. All Fire Safety Specialists have obtained the required knowledge through a variety of resources such as Fire Protection Engineering Degree Programs, NFPA Certification Programs, or other recognized courses such as:

- NFPA 101, Life Safety Courses
- NFPA 13/25, Installation, Inspection, Testing and Maintenance of Water Based Suppression Systems;
- NFPA 72, Fire Alarm Systems;
- National Institute for Certification in Engineering Technologies (NICET)-Fire Alarm Systems;
- Manufacturer fire alarm or fire suppression certification; and/or
- OSHA Compliance

(See Preface, Fire Safety Division Staff-Educational and Professional History)

Administration of Fire and Life Safety Management Functions:

Fire and life safety responsibilities are shared among a multi-disciplinary group. Each has specific responsibilities for design, implementation, testing, maintenance or monitoring of part of the Fire/Life Safety Management Plan under the institutional plan for the Management of the Environment of Care. The goal is to provide a safe, functional, supportive, and effective environment for patients, staff members, and other individuals in Duke University healthcare facilities.

Safety Management Safety Officer Dr. Thomann
Duke University Safety Committee

September 2003; Reviewed & Updated January 2006, January 2007

Utilities Management Engineering & Operations Mr. Guerry

Security/Egress Duke University Police Department Mr. Garber

Emergency Preparedness Emergency Department

Mr. Vargas

Fire and Life Safety Fire Safety Division (OESO) Mr. Knipper

Facility Planning, Design & Construction Mr. Subasic

Additional units supporting the Fire/Life Safety management of the Environment of Care include:

Performance Improvement Accreditation and Patient Safety Office Mr. Kelly

Description of Duties and Functions:

Safety Officer: Dr. Wayne R. Thomann is the Director of the Occupational and Environmental Safety Office and the designated Safety Officer with the responsibility for coordinating the efforts of the participants in the Fire Prevention Management Plan. He also serves as the Chair of the Duke University Safety Committee (DUSC). The Safety Officer and the DUSC provide oversight for the development, implementation, and monitoring of fire and life safety activities.

Engineering and Operations: Engineering and Operations has the primary responsibility for maintaining the Statement of Conditions. In addition, they are responsible for correcting deficiencies identified during surveys and inspections in all Duke owned Hospital, Clinic and Medical Center facilities.

Duke University Police Department: The Duke University Police Department is responsible for all security issues within Duke Hospital, Duke Clinic and Medical Center.

Emergency Department: The Emergency Department has the primary responsibility for the Hospital Incident Command System. They work with all key departments to create sub plans for emergency response and notification.

OESO-Fire Safety Division: The Fire Safety Division is a part of the Occupational and Environmental Safety Office and reports directly to Dr. Thomann. The Fire Safety Division has the primary responsibility of all fire and life safety issues throughout the institution. It also acts as liaison with City of Durham Fire Prevention Bureau and all departments.

Facility Planning, Design and Construction: Facility Planning, Design and Construction has the primary responsibility to ensure that all new construction and building renovations meet or exceed all applicable codes and standards.

Accreditation and Patient Safety Office: The Accreditation and Patient Safety Office schedule and conduct Environment of Care Rounds to evaluate staff performance and knowledge. Fire Safety personnel participate in the EOC Rounds.

Fire Prevention Management Activities:

Duke University Safety Committee: The Duke University Safety Committee is composed of representatives from administration, clinical services, support services, and the Patient Safety Office. The Safety Committee is responsible for the direct oversight of all fire and life safety activities related to the management of the Environment of Care. The Fire Safety Division makes monthly reports to the committee concerning fire safety activities.

Facilities Services Work Group (FSWG): The FSWG is composed of representatives from administration, Duke Police, Fire Safety Division, Engineering & Operations and Facilities Planning, Design and Construction and is responsible for the direct oversight of all security issues and to ensure a collaborative effort by key departments relating to the installation of security systems and how they impact the Environment of Care Standards. Departments or individuals wishing to install security devices or alter existing security conditions must provide plans and specifications to the FSWG. If approved, the plan is then forward to the City of Durham Fire Marshal for final approval.

Grounds and Lighting Tour: The Grounds/Lighting Tour is composed of representatives from administration, Duke Police, Engineering & Operations, University Grounds and Fire Safety Division and responsible for the oversight of security lighting and determination of exterior safety of grounds, parking lots, sidewalks and surrounding areas.

Statement of Conditions: The Work Group consists of representatives from Engineering and Operations, Fire Safety Division, Facility Planning, Design and Construction and is responsible for the oversight and management of deficiencies discovered during EOC Rounds, Hazard Surveillance Surveys, Fire/Life Safety Inspections and others. The Group works together to set priorities and to develop Plans for Improvement (PFI) as necessary.

Construction Risk Assessment Program: The Construction Risk Assessment Committee is composed of various Departments that have oversight or direct management of specific risks such as infection control, utilities or building systems, fire and life safety Interim Life Safety Measure (ILSM), general safety issues and security. The Committee assesses all potential hazards associated with construction and renovation. The OESO-Fire Safety Division has the responsibility for evaluating impact on fire and life safety issues. Any project that significantly impacts fire and life safety results in the development of ILSM that includes daily inspections, training and contractor compliance with all applicable codes and standards.

EC.5.10 - Managing Fire Safety Risks

OESO-Fire Safety Division has the primary responsibility for managing the protection of patients, employees, visitors and property from fire, smoke and other products of combustion. (See Appendix I: Duke University Safety Manual and Appendix G: Site Specific Fire Safety Policy)

OESO-Fire Safety Division provides oversight and consultation for fire alarm systems installation and maintenance. Engineering and Operations is responsible for inspecting, testing and maintaining fire alarm systems, including quarterly testing of all circuits and annual

preventive maintenance of all components. (See Appendix B: Engineering and Operations-Communications Division)

OESO-Fire Safety Division is responsible for the development of fire code standards and requirements for acquisitions of bedding, window draperies or curtains, furnishings, decorations, wastebaskets and other equipment. Procurement Services is responsible to ensure that all materials purchased meet these requirements and standards. (See Appendix D: Duke University Procurement Services Guidelines)

Facility Design and Construction is responsible for ensuring that each patient area has a correct evacuation route map. OESO Fire Safety will ensure the accuracy of the route map during routine inspections and other unit visits as necessary. (See Appendix G: Site Specific Fire Safety Policy and Appendix J: Fire Evacuation Route Maps)

EC. 5.20 - Ensuring that newly constructed and existing environments of care are designed and maintained to comply with the Life Safety Code ®.

In order to guard against the threat of fire and to comply with the NC Fire Code (NC Fire Prevention Code, 2006 Edition), the Life Safety Code (NFPA 101, 2000 Edition) and other legal and regulatory requirements, all new construction and major renovations in the hospital, medical center and clinic buildings are constructed to meet the fire safety code requirements.

(EC.9.10) Engineering and Operations has the primary responsibility for the Statement of Conditions and the document is maintained at their main office. Facility Planning, Design and Construction (FPDC) maintain building floor plans and provides E&O with updates. OESO-Fire Safety Division has the responsibility of identifying facility deficiencies and provides oversight for the initiation and completion of Plans for Improvement (PFI). Engineering and Operations has the responsibility of correcting deficiencies and PFIs. All three Departments meet on an as needed (Monthly when Open PFIs exist) to review PFIs, deficiency lists and to ensure that the SOC and PFI(s) are accurate and up to date. This committee is responsible for identifying any corrections that require special funding or scheduling and ensure that the corrections are listed in the Statement of Conditions and a PFI is developed. (See Appendix A: Statement of Condition)

EC 5.30 - Fire Drills:

Fire drills are conducted for three reasons: fire drills allow employees to practice fire response (training), reinforce fire safety (education) and allow for evaluation of staff knowledge. To ensure that drills provide the maximum benefit, personnel should respond to each drill as if there were an actual fire. All fire drills conducted in patient care and clinical areas will be unannounced.

Fire drill frequency is dependent upon the occupancy classification of the facility and other factors. Fire drill frequency adheres to the following guidelines, however, additional drills may be conducted from time to time:

Health Care; Ambulatory Care; and College of American Pathologists (CAP) laboratories Is the above sentence supposed to be separated? one fire drill during each shift every quarter

Areas under renovation or construction requiring Interim Life Safety Measures (ILSM) when various deficiencies and construction hazards warrant additional measures: Business Occupancies:

two fire drills during each shift every quarter one fire drill annually

Fire Alarm Notification:

Patient Care Facilities:

In Duke Hospital, Duke Clinic, Eye Center and the MRI the fire alarm utilizes a numerical code, referred to as the Life Safety System, through a speaker system to identify the specific area involved. This numerical code is repeated three times throughout the facility. There is a pause and the code is repeated three times, but only in the reporting area. Employees are familiar with the fire alarm code in their work area. In other patient care areas the fire alarm utilizes audio-visual devices to notify the occupants of a general fire alarm.

Other facilities (Ambulatory Care and Medical Center Buildings):

In Medical Center facilities, community Private Diagnostic Clinics (PDC), Duke University Affiliated Physicians, Inc. (DUAP) or other ambulatory care facilities the fire alarm (if present) utilizes audible and/or visual devices to notify the occupants of a general fire alarm. If no fire alarm system is present, the alert is provided by verbal message.

Fire Drills:

Fire drills are divided into two categories: actual fire drill and standby fire drill.

Actual Fire Drill: A specific fire zone is selected for each fire drill. Drill locations are tracked to ensure that all fire zones will be tested in a given time period without duplication. Up to 50% of false alarms may be utilized to satisfy fire drill requirements. However, in order for a false alarm to count for an actual fire drill, it must be evaluated and documented on a Fire Drill Evaluation form. The OESO-Fire Safety Division utilizes a Fire Drill Evaluation form and database to determine the effectiveness of each actual fire drill by evaluating the staff participation and understanding of the fire response (RACE), as well as, site-specific fire response issues in the area or zone where the fire alarm was initiated. Each unit participating in an actual fire drill is given a score to determine whether it "passed" or "failed". Pass or Fail criteria is outlined on each Fire Drill Evaluation Form and must pass the fire drill with a score of 90% or more. Those departments who fall below this 90% score will be rescheduled within 30 days for a follow-up fire drill. Additional fire drills are required until a passing score is obtained.

<u>Standby Fire Drill</u>: All areas not directly affected by the fire drill are included in the standby fire drill. Standby fire drills may range from simple acknowledgement to actual implementation of part of the site specific fire plan. The on-site Supervisor or Department Head is required to complete a Standby Fire Drill Form after each fire drill,

false fire alarm or fire alarm activation. The Fire Safety Division tracks all standby fire drills to ensure that the minimum of 20% of the fire zones respond during each fire drill.

(EC 9.10) Fire Drill Summaries are presented to the Duke University Safety Committee quarterly. Information gained from these evaluations is used to identify problems or opportunities to improve the fire response system as well as safety education programs. (See Appendix F: Departmental Fire Drills)

EC 5.40 -Maintenance of fire-safety equipment and building features.

OESO-Fire Safety Division provides oversight for maintaining compliance with the NC Fire Code and Life Safety Code (NFPA 101, 2000 edition) standards regarding structural requirements for fire protection through routine inspections and the testing and maintenance of fire equipment in both Duke owned and Duke leased facilities.

Duke Owned and Maintained Facilities:

Unless otherwise noted, Engineering and Operations is responsible through contract services or in-house operations for the routine inspections, testing and maintenance of fire protection equipment and correcting deficiencies noted in all Duke owned and maintained facilities to include Duke Hospital, Duke Clinic and Duke Medical Center. All records of these inspections are maintained on file at the Engineering and Operations office.

Duke Leased Facilities:

Building owners or facility managers are responsible through contract services or inhouse operations for the routine inspections, testing and maintenance of fire protection equipment and for correcting deficiencies noted for all Duke leased facilities. Records are maintained on-site of each and all inspections. The OESO-Fire Safety Division is responsible for ensuring that the testing and maintenance of the all fire protection equipment is in compliance with all applicable regulations and standards. OESO-Fire Safety Division reviews inspection and maintenance documentation annually to ensure that the fire protection equipment is inspected in accordance with the applicable NFPA standards and NC Fire Code and that all deficiencies noted during inspections are corrected in a timely manner. (EC 9.10) OESO-Fire Safety Division reports the failure of any owner/facility manager to correct deficiencies or failure to comply with the standards or schedule to Contract Services for further action.

Unless otherwise noted, the following procedures refer to only Duke Owned facilities:

1. Fire Alarm Testing:

The testing of the fire alarm system and components complies with NFPA 72 standards and on a routine schedule in accordance with the EOC standards. Testing of the various components will adhere to the following schedule:

Quarterly: Supervisory signal devices, water flow alarms,

proprietary monitoring and Durham Fire Department notification

Semi-Annual: Valve tamper switches

Annually: Duct detectors, electromechanical releasing devices, heat detectors,

manual fire alarm pull stations, smoke detectors and occupant

alarm devices (audible and visual).

2. Water-based Automatic Fire Extinguishing Systems (sprinklers, standpipes, fire pumps, fire department connections):

The testing and maintenance of the water-based automatic fire extinguishing systems complies with NFPA 25 standards and testing is maintained on a routine schedule as outlined in accordance with NFPA and EOC standards. Testing of the various components adhere minimally to the following schedule:

Weekly: Fire pumps (no water flow required)

Quarterly: Fire department connections, water flow devices

Semi-annually: Sprinkler valves

Annually: Fire pumps (water flow required) and

drain tests at all system risers

Weekly fire pump inspection records are maintained by Engineering & Operations. Documentation of the quarterly and annual inspections is maintained at OESO-Fire Safety Division office. (EC 9.10) A deficiency report is sent to Engineering and Operations upon completion of the quarterly/annual inspections for corrections.

3. Kitchen automatic fire extinguishing systems:

The testing and maintenance of kitchen automatic fire extinguishing systems complies with NFPA 17A and NFPA 96 standards and are the responsibility of OESO-Fire Safety Division through contract services. Inspections of the systems are completed semi-annually.

4. Gaseous automatic fire suppression systems:

The testing of gaseous automatic fire suppression systems complies with NFPA 2001 and NFPA 12 standards and are the responsibility of OESO-Fire Safety Division contract services for the inspection, testing and maintenance of all gaseous automatic fire suppression systems to include Halon and FM-200 Suppression Systems. Documentation is maintained at 1411 Hull Street. Inspections of those systems are completed annually. (See Appendix C: OESO-Fire Safety Division Fire Protection Inspection Reports)

5. Portable Fire Extinguishers:

OESO-Fire Safety Division is responsible through contract services for the installation, maintenance and testing of fire extinguishers in accordance with NFPA 10 and the Durham City Fire Prevention Code throughout all areas.

OESO-Fire Safety Division is responsible for ensuring proper fire extinguishers are correctly mounted and clearly identified at installation or after renovation, construction or major changes in occupancy. Extinguishers in cabinets where the location is not clearly

visible or extinguishers located in areas not clearly seen from the path of travel will be marked with signs.

OESO-Fire Safety Division is responsible through contract services to ensure that all fire extinguishers function properly, are inspected monthly, and annually and receive regular preventive maintenance in accordance with NFPA 10 and manufacture specifications. (See Appendix C: OESO-Fire Safety Division Fire Protection Inspection Reports)

6. Standpipe Systems:

Testing and maintenance of standpipe systems, both wet and dry, comply with NFPA 14 and NFPA 25 standards, OESO-Fire Safety Division is responsible for the testing and maintenance of standpipe systems through contract services. Testing of standpipe systems is in accordance with NFPA standards and tested on a routine basis as outline in the NFPA standard. Water flow tests are conducted every five years. Duke University maintains Class I standpipe systems that do not require fire hoses and therefore, no fire hose testing is required. Documentation of inspections and maintenance is maintained at OESO-Fire Safety Division office.

7. Fire and Smoke Dampers:

Inspection and maintenance of fire/smoke dampers complies with NFPA 90A. Engineering and Operations is responsible for the identification and maintenance of all fire/smoke dampers to ensure proper operation. Inspections of all fire and smoke dampers are completed annually. Fire and smoke dampers (with fusible links removed) are operated no less than every four years to ensure full closure.

Deficiencies noted during inspections are corrected in-house or through contract services. Documentation of inspections is maintained at Engineering and Operations office.

8. Automatic smoke detection shutdown devices for air handling units:

Testing and maintenance of automatic smoke detection shutdown devices for air-handling units complies with NFPA 90A. Engineering and Operations is responsible for the inspection, testing and maintenance of all air handling shutdown devices. All shut down devices are tested at least annually.

Deficiencies noted during inspections are corrected in-house or through contract services. Documentation of inspections is maintained at Engineering and Operations office.

9. Horizontal and vertical sliding and rolling fire doors and shutters:

Testing and maintenance of horizontal and vertical sliding and rolling fire doors and shutters complies with NFPA 80. OESO Fire Safety is responsible through contract services for the inspection, testing and maintenance of all sliding and rolling fire doors. All rolling and sliding fire doors are tested annually to ensure proper operation and full closure. Deficiencies noted during inspections are corrected in-house or through contract services. Documentation of inspections and corrections is maintained at the OESO-Fire Safety Division.

10. Smoke Control Systems:

Testing and maintenance of smoke control systems complies with NFPA 92 A&B. Engineering and Operations is responsible for testing and maintenance of smoke control systems. Documentation of inspections is maintained at Engineering and Operations Office.

5.50 - Interim Life Safety Measures and Construction Risk Assessment:

Construction Risk Assessment: Potential impact on existing life/fire safety are identified by the Project Manager through the completion of the Construction Risk Assessment form. Fire Safety reviews all such forms and work with the Project Manager to establish Interim Life Safety Measures as necessary (See Appendix S: Construction Risk Assessment Form.)

<u>Interim Life Safety Measures:</u> OESO-Fire Safety Division is responsible for the implementation of the Interim Life Safety Measures (ILSM) during any construction, renovation or maintenance activity that would impact on life and fire safety. OESO-Fire Safety reviews documentation (floor plans, architectural drawings, specifications, etc.) provided by Facility Planning, Design and Construction, Engineering and Operations and Departments to evaluate the scope of the renovation or construction. If a Construction Risk Assessment Form has not been completed, then Fire Safety personnel perform an initial survey at the site. Fire Safety Division is responsible for the development of all training materials and information, the implementation of expanded fire drills, daily inspections/documentation and compliance of all contractors with ILSM during the construction period. An ILSM inspection checklist that includes the following criteria as outlined in the Environment of Care Standards will be utilized to identify all deficiencies and ensure compliance with the eleven ILSM elements as outlined in the Environment Of Care. OESO Fire Safety is responsible for the distribution, posting, and briefing the supervision for the area affected by the ILSM. All ILSMs will be briefed at the Duke University Safety Committee scheduled meeting. (See Appendix N: Interim Life Safety **Measures Initial Inspection Form)**

OESO-Fire Safety Division is responsible for developing and implementing a hospital wide safety education program to promote awareness of life safety building deficiencies, construction hazards, Interim Life Safety Measures and emergency response. This is done through General Orientation and annual Safety Update training. In addition, OESO-Fire Safety Division is responsible for reviewing all construction and renovation to determine if ILSM are necessary. If ILSMs are necessary, OESO-Fire Safety Division is responsible for on-site training at the beginning of any renovation or construction. Construction Services is responsible for providing all documentation and information to all contractors necessary for full compliance. These include:

- Hot Work Permits
- Construction Boards with pertinent fire and life safety training materials
- Fire extinguisher placement and maintenance
- Environment of Care requirements to include **RACE** and **PASS** procedures
- Fire Code and other regulatory requirements.

EC.9.10 - Environment of Care Monitoring

OESO-Fire Safety Division is responsible for developing the performance improvement standards for Fire Prevention. (See Appendix O: Performance Improvement Plan, OESO-Fire Safety Division)

Objectives, scope performance and effectiveness of the Fire Safety Management Plan are evaluated annually. (EC 9.10) Reports are made to the Safety Committee monthly.

ANNUAL EVALUATION OF THE SCOPE, OBJECTIVES, EFFECTIVENESS, AND PERFORMANCE OF THE EOC MANAGEMENT PLANS

SCOPE: Any changes in *scope* will be addressed during the annual update of the Plan, and any changes in the range of application or interactions will be incorporated into the updated Plan. The completion date significant scope changes for the annual update of the EOC Management Plans is as follows:

EOC FUNCTION	APPROVED	2007 SIGNIFICANT CHANGES
Fire/Life Safety	01-16-07	No Changes.

OBJECTIVES: Annual planning *objectives* are developed through interactions with Committee members and hospital administration. These objectives address the primary operational initiatives for maintaining and enhancing the Environment of Care. (EC 9.10) Progress toward accomplishing these objectives are reported at least quarterly to the Committee and a year-end summary of the *effectiveness* in accomplishing these objectives is also presented. The primary 2007 planning objective for the EOC Management Plans is as follows:

EOC FUNCTION	APPROVED	PRIMARY OBJECTIVES FOR 2007
Fire/Life Safety	01-16-07	 Expand situational awareness of all workers to help decrease the number of fire alarm false activations. (PA in 2006) Analyze data and determine appropriate measures to reduce trouble alarms by 50%. Initiate methods to reduce the number of fires around the exterior of facilities involving mulch.

EFFECTIVENESS: The *effectiveness* of the EOC management functions is assessed through a Committee review of their success in achieving the accomplishments defined in their planning objectives. The completion date and significant findings from the annual 2006 review is as follows:

01-16-07	1 EA Improve electronic input to work
	 FAImprove electronic input to work order/service requests database in recording deficiencies, expedite service requests and track completion times. FADevelop operational parameters for utilization of mechanical and utility room space that complies with NC State Fire Prevention Code
	3. PA – Expand situational awareness of all workers to help decrease the number of fire alarm false activations.

FA = Fully Achieved; PA = Partially Achieved

PERFORMANCE: The *performance* of the Management Plans is assessed through progress in achieving the Performance Improvement Standards defined within the Performance Improvement Plan for each of the functions. The completion date for the annual update of the EOC Performance Improvement Plans is as follows:

EOC FUNCTION	APPROVED	PERFORMANCE IMPROVEMENT STANDARDS 2007
Fire/Life Safety	01-16-07	1. Increase the number of initial inspection total compliance/meets standards and subsequently reduce the need for follow-up/return inspections.

(See Appendix K: Minutes of Duke University Safety Committee Minutes and Appendix O: Performance Improvement Plan-OESO Fire Safety Division)

EC.1.10 - Risk Assessment

OESO-Fire Safety Division is responsible for monitoring fire and life safety through hazard surveillance surveys. Hazard surveillance surveys are conducted to identify deficiencies and to monitor and evaluate initiatives to correct these deficiencies. Hazard Surveillance surveys are conducted annually in non-patient care areas and semi-annually in patient care areas. City of Durham Fire Prevention Bureau conducts the annual non-patient survey and one of the semi-annual surveys in patient care areas. OESO-Fire Safety Division Specialists conduct the remaining semi-annual survey in patient care areas. Additional Hazard Surveillance Surveys may be conducted as needed. Hazard Surveillance Survey forms are kept on file at 1411 Hull Street. (EC.9.10) Deficiencies noted are forward to the appropriate department for correction. (See Appendix R: Hazard Surveillance Survey form and Appendix L: City of Durham Fire Prevention Inspections and Appendix K: Duke University Safety Committee Minutes.)

OESO-Fire Safety Division is responsible for investigating and reporting life safety code and fire protection deficiencies, failures or user errors through Fire Safety Division Surveys, Durham City Fire Prevention inspections, Interim Life Safety Measure inspections and DPD Incident Reports. (EC.9.10) Fire Safety Division is responsible for forwarding this information to the appropriate departments for corrections. (See Appendix E: Duke Police Department Incident Reports, Appendix F: Departmental Fire Drills, Appendix L: City of Durham-Fire Prevention Inspections and Appendix M: Environment of Care reports)

OESO-Fire Safety Division is responsible for the collection of fire and life safety data and deficiencies and (EC.9.10) monthly reports are presented to the Duke University Safety Committee. (See Appendix F: Departmental Fire Drills, Appendix K: Minutes of Duke University Safety Committee, Appendix L: City of Durham Fire Prevention Inspections and Appendix M: Environment of Care reports)

EC.4.10 - Emergency Management

OESO-Fire Safety Division, Durham Fire Department, Duke University Police and Emergency Management Coordinator are responsible for emergency procedures that address facility wide fire response needs and the development of emergency procedures through the Hospital Emergency Incident Command System (HEICS) in collaboration with the Disaster Committee. The Fire Safety Division is responsible for the development and implementation of the Code Red sub-plan. In addition, Fire Safety Division has responsibilities under the Code Orange sub-plan and takes an active role in all HEICS drills. As part of the Code Orange sub-plan the Fire Safety Division Director or his departmental representative assumes the role of Safety Group Supervisor at the Safety Operations Center. An OESO Fire Safety Division Specialist will be designated as the Fire Safety Assessment Officer, part of the support for the Logistics Section, when it is deemed necessary to activate the Logistics Section. (See Appendix P: HEICS Fire Safety Assessment Officer)

HR.2.20 Training

OESO-Fire Safety Division is responsible for developing and implementing a fire response plan that addresses:

- a. Facility wide fire response
- b. Area specific needs including fire evacuation routes and emergency assembly points (EAP)
- c. Specific roles and responsibilities of staff, Licensed Independent Practitioners (LIPs)and volunteers at a fire's point of origin
- d. Specific roles and responsibilities of staff, LIPs and volunteers away from the fire's point of origin
- e. Specific roles and responsibilities of staff, LIPs and volunteers in preparing for building evacuation.

(See Appendix G: Site Specific Fire Plan)

Training is provided through a collaborative effort between OESO and Education Services. OESO-Fire Safety Division is responsible for the development of all fire safety materials and training session content. (See Appendix H: Education Services.)

Training is generally categorized into two programs: General Orientation/Update Training and Site Specific Training.

General Orientation and Annual Safety Update Training: This
training targets most employees, contractors and volunteers and focuses on
general fire safety issues, fire alarm notification, general evacuation
(RACE), general fire extinguisher usage (PASS) and the Environment of
Care.

• **Site Specific Fire Training:** This training requires a higher level of participation and employee responsibility. The orientation and training of unit/dept staff occurs during the collaborative development of the Site Specific Fire Plan. The staff receives update training to the details of this plan, including evacuation, during all fire drills conducted in their areas. (**See Appendix G: Site Specific Fire Safety Policy**)

OESO-Fire Safety Division, in collaboration with each Department, is responsible for the development of a Site Specific Fire Plan (SSFP) for each work area. Site Specific Fire Plans are reviewed at least once every three years. SSFPs are submitted to the Duke University Safety Committee for approval prior to implementation. SSFPs include instructions for horizontal evacuation and list the Emergency Assembly Point for vertical evacuation should the Incident Command Post (ICP) mandate a total evacuation. (See Appendix G: Site Specific Fire Safety Policy and Incident Command Post Policy).

All patient care areas have a copy of the Site Specific Fire Plan on site and a back up copy is kept electronically of the OESO server. The plan may simply state that all employees, visitors and patients are notified to be alert and be prepared for further instruction, or it may give more stringent guidance. The on-site supervisor, department head, or their designated representative in their absence, is responsible for the implementation of the Site Specific Fire Plan and the safe evacuation of all employees, volunteers, patients and visitors from the area. (See Appendix G: Site Specific Fire Safety Policy or Appendix I: Duke University Safety Manual.)

- Physicians and other Licensed Independent Practitioners working in the area or fire
 zone of the building where the alarm is activated report to the on-site supervisor or
 department head for specific instructions.
- Duke Police, Environmental Services and Engineering and Operations personnel in the affected area refer to their specific fire plans for appropriate response.
- All employees, volunteers, patients and visitors in an area or fire zone of the building where the alarm is activated, follow the directions of the supervisor or department head in the implementation of the site specific fire plan or the general fire alarm response procedures, relocate patients when obvious danger exists or when directed to do so by fire department officials or the administrator on call.
- Other employees, volunteers, contractors or visitors in a facility when a general alarm is activated follow the general fire evacuation policy for that area (RACE).

ADDITIONAL INFORMATION:

For additional information and specific procedures regarding fire safety, refer to Appendix I: Duke University Safety Manual or if applicable, to Appendix G: Site Specific Fire Safety Policy.